

and torsional motion in frequency synchronism, the longitudinal-torsional resonator mechanically joined to

a tip shaped for cutting of resistant biological tissue.

4. (Twice amended.) An ultrasonic longitudinal-torsion tissue dissection system comprising

an electrical generator supplying alternating electrical voltage and current at a single frequency by connection to

an electro-mechanical transducer excited at the single frequency by the electrical generator, the electro-mechanical transducer joined mechanically to

a longitudinal-torsional resonator excited by the electro-mechanical transducer at [a] the single frequency for providing combined longitudinal and torsional motion in frequency synchronism, the longitudinal-torsional resonator mechanically joined to
a tip shaped for cutting of resistant biological tissue

a source of irrigation fluid connected to

said longitudinal-torsional resonator.

8. (Twice amended.) An ultrasonic longitudinal-torsion tissue dissection system comprising

an electrical generator supplying alternating electrical voltage and current at a single frequency by connection to